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United States  
Department of  
Agriculture

Soil  
Conservation  
Service

Portland,  
Oregon



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# Water Supply Outlook for Oregon as of MARCH 1, 1982

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## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: LONE CONE, NEAR NORWOOD COLORADO, BLANKETED  
BY ITS WINTER MANTLE OF SNOW.

### PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

### PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



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# **WATER SUPPLY OUTLOOK FOR OREGON**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS //

*Issued*

MARCH 1, 1982

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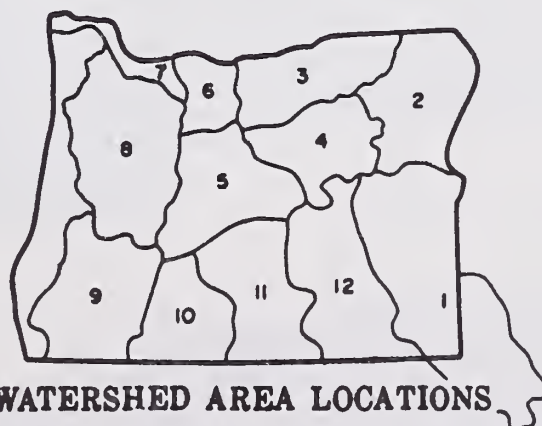
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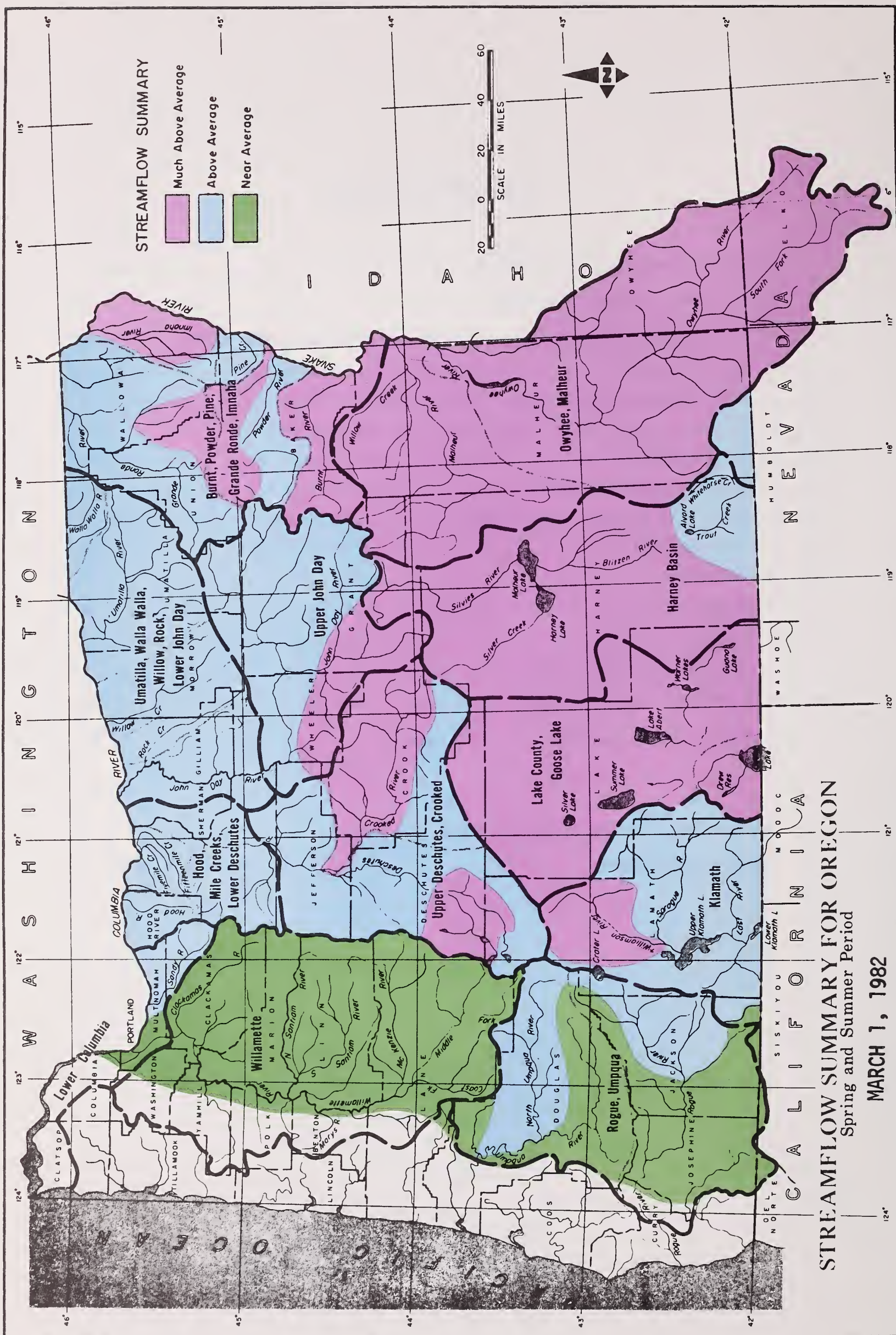


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# STREAMFLOW SUMMARY FOR OREGON

### Spring and Summer Period

**MARCH 1, 1982**



# WATER SUPPLY OUTLOOK AND SUMMARY FOR OREGON

MARCH 1, 1982

\*\*\*\*\*  
\* Water supply prospects for Oregon remain excellent for most water users \*  
\* this next summer. February brought generous amounts of rainfall to most \*  
\* of the state. Warm temperatures with this rain melted much low elevation \*  
\* snowpack and caused heavy flows on many of the streams in Oregon. The \*  
\* snowpack, however, generally remains above to much above normal. Storage \*  
\* is above average in most of the principal irrigation reservoirs. \*  
\* \*  
\*\*\*\*\*

## SNOW COVER

The snowpack on the west side of the Cascades ranges from near average to above average. Some low elevation watersheds are below normal now because of the warm rains in February which caused so much melting. For example the McKenzie snowpack is 122% of average, while the lower elevation Coast Fork of the Willamette is 77%. The Siskiyou have a snowpack 1/2 of normal on the Illinois drainage, but on Mt. Ashland it is near average. Eastern Oregon snow cover is above to much above average except on lower elevation watersheds such as Bully Creek, those in Lake County and the Mile Creeks near The Dalles where it is 70 to 80%. The warm rains melted much of the snow in these areas with resultant high volume streamflows during the month.

## PRECIPITATION

Rainfall during February was much above average in all areas of the state except for the counties along the Columbia from the Lower John Day to Pendleton where it was a little below average. Areas receiving the most rain were the counties along the California-Nevada line. Here percentages ranged from 130 to 230%. This is the area where most of the mountain snowpack was lost.

## RESERVOIR STORAGE

Twenty-four major irrigation reservoirs were storing 2,500,000 acre feet on March 1. This is 120% of average. A few reservoirs are still below average for this time of year and many are being held below capacity as much streamflow is yet to come from the snowpack.

-continued on next page-

## STREAMFLOW

Streamflow was generally heavy during February. For example, Bully Creek reservoir had a total inflow during the month of 51,000 acre feet. This is about 13 times normal. The mountain snowpack will contribute good flows this next spring and summer. Soils around the state are well saturated and any precipitation received should contribute to runoff.

Representative forecasts of streamflow compared to the 1963-77 average are as follows:

<u>STREAM</u>	<u>PERIOD</u>	<u>% OF AVERAGE</u>
Owyhee net Inflow	April-Sept.	133
Grande Ronde @ LaGrande	April-Sept.	130
Umatilla @ Pendleton	April-Sept.	118
Deschutes @ Benham Falls	April-Sept.	112
Willamette Mid.Fk. nr. Oakridge	April-Sept.	110
Rogue at Raygold	April-Sept.	120
Upper Klamath Lake net Inflow	April-Sept.	125
Silvies nr. Burns	April-Sept.	159

These forecasts assume normal weather conditions will occur from March 1 through September.

The forecasts in this bulletin are a result of a coordinated activity between the Soil Conservation Service and the National Weather Service as an effort to provide the best possible service to the water user.

This report contains data furnished by the Oregon Department of Water Resources, U.S. Geological Survey, NOAA National Weather Service and other cooperators.





## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Bully Creek at Warm Springs	19.9	158	March-May		12.6 <sup>b</sup>
Malheur near Drewsey	129	140	March-July		92
	95	130	April-Sept.		73
Malheur, North Fork at Beulah	111	150	March-July		74
	100	150	April-Sept.		67
Owyhee Reservoir net Inflow	670	131	March-July	185	510
	520	133	April-Sept.	167	392
Owyhee at Rome	728	135	March-July		539 <sup>b</sup>
Succor Creek near Jordan Valley	20.1	148	March-July		13.6 <sup>b</sup>

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/ Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	2000	May 22	May 14
	1000	June 11	May 28
	500	July 3	June 11

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Beulah Reservoir	60.0	53.8	31.7	34.2
Bully Creek	30.0	21.9	25.9	15.8
Owyhee	715.0	683.5	563.7	516.8
Warm Springs	191.0	163.1	158.4	108.2

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Jordan Creek	3	307	132
Malheur River	5	187	133
Owyhee River	6	452	145
Bully Creek	2	5,100	76

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

## GENERAL OUTLOOK

Excellent water supplies are forecast for Baker, Union and Wallowa counties. The mountain snowpack is 130 to 140% of average. Rainfall during this past month was 144% of normal. Reservoir storage is above average and all principal reservoirs are expected to fill from snowmelt later in the spring. Streamflow for March-July will range from 120 to 170% of average.



USDA SCS PORTLAND, OR 97201  
M7-OL-22026-2



# STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average C
Anthony Creek blw. North Fork nr. North Powder	21	130	March-July		16.5
Bear near Wallowa	86	132	April-Sept.		65
Big Creek blw. Burn Creek nr. Medical Spring	17.2	150	March-July		11.5
Burnt near Hereford	77	170	March-July		45
	64	176	April-Sept.		36
Catherine near Union	86	136	April-Sept.		64
Deer Creek abv. Phillips Res. nr. Sumpter	25	145	March-July		17.3
Eagle Creek abv. Skull Creek	233	138	April-July		169
	253	137	April-Sept.		184
Grande Ronde at La Grande	252	130	March-July		194
	209	130	April-Sept.		161
Hurricane near Joseph	55	119	April-Sept.		46
Imnaha at Imnaha	443	145	April-Sept.		305
Lostine near Lostine	144	117	April-Sept.		123
Pine Creek nr. Oxbow	262	114	March-July		230
Powder near Sumpter	69	121	April-July		57
	72	124	April-Sept.		58
Wallowa, East Fork near Joseph	14.5	119	March-Sept.		12.2
	14.1	123	April-Sept.		11.5
Wallowa at Joseph	84	122	May-July		69
Wolf Creek Res. net Inflow	18.7	142	March-June		13.2b

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Phillips Lake	73.5	54.7	56.8	50.1
Thief Valley	17.4	18.0	17.7	17.3
Unity	25.2	20.6	23.0	15.0
Wallowa Lake	37.5	23.4	25.2	22.5
Wolf Creek	10.4	3.2*	6.4	--
*2/20 reading				

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Burnt River	4	223	138
Grande Ronde River above LaGrande	3	409	136
Powder River	5	214	129
Wallowa, Imnaha, Catherine Creek	6	214	140

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Eagle Cr.abv. Skull Creek	225 160	Aug. 11 Aug. 24	July 25 Aug. 5 Avg. value 49
Catherine Creek nr. Union	64 100 50	Aug. 1 July 22 Aug. 9	July 9 July 28
Powder near Sumpter	100 20	July 2 July 26	June 25 July 22
Deer Cr. abv. Phillips Res. nr. Sumpter	40 10	June 26 July 16	June 17 July 6

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



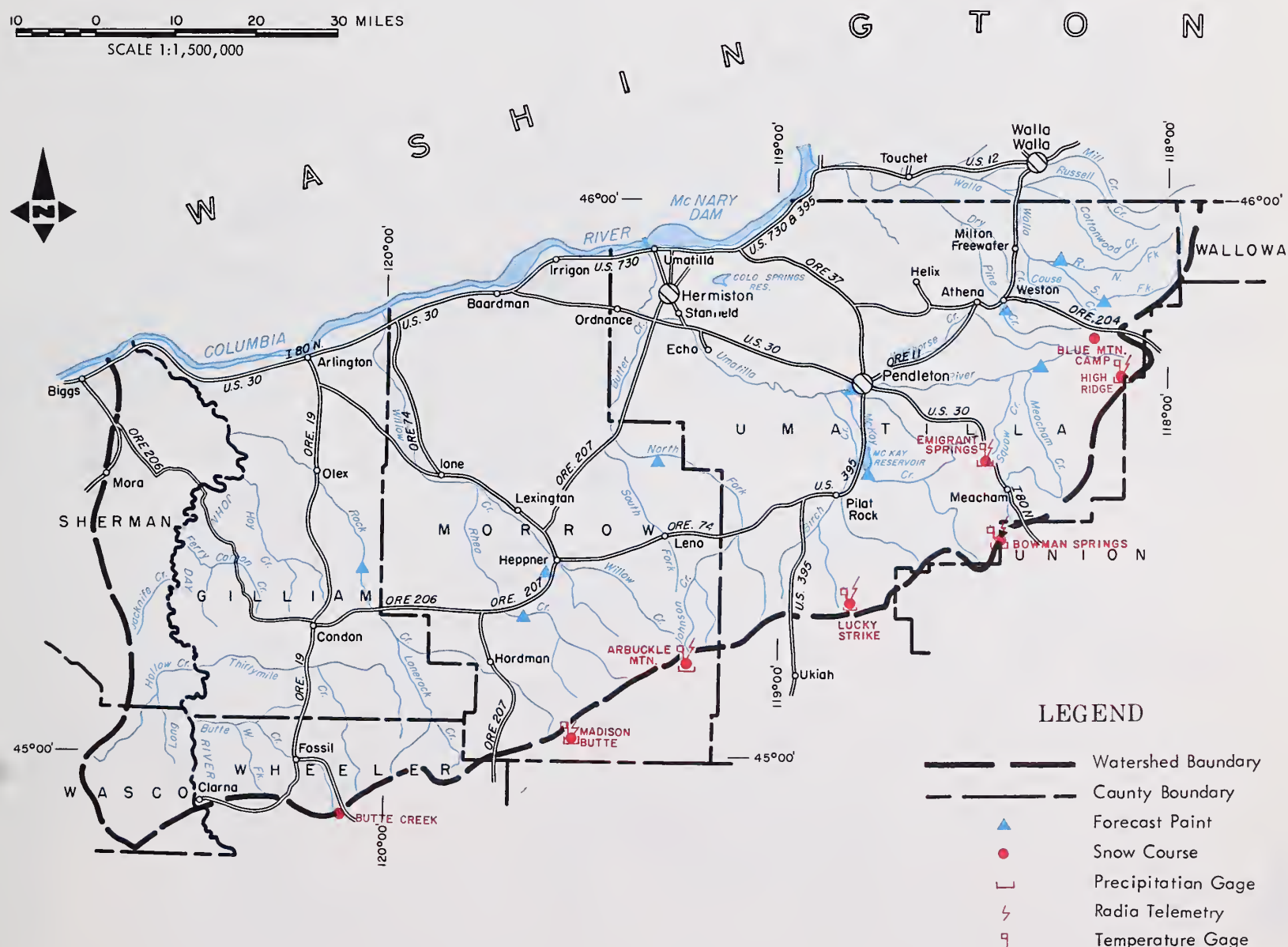
# WATER SUPPLY OUTLOOK

## UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Water supplies in Morrow, Gilliam and Umatilla counties are expected to be excellent. The mountain snowpack is 110 to 130% of average. Rainfall during February was slightly below average, but is 110% of normal for the November through February period. Reservoir storage is good with both Cold Springs and McKay to be filled later this spring. Streamflow is forecast to be 110 to 130% of average this next spring and summer.



# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Butter Creek nr. Pine City	12.9	120	March-July		10.7
Couse Creek nr. Milton Freewater	7.3	130	March-July		5.6 <sup>b</sup>
McKay near Pilot Rock	30	133	April-Sept.		22
Pine Creek near Weston	5.7	130	March-July		4.4 <sup>b</sup>
Rhea Creek nr. Heppner	7.8	125	March-July		6.2
Rock Creek abv. Cayuse Canyon nr. Condon	20.0	120	March-July		16.8 <sup>b</sup>
Umatilla near Gibbon	122	123	March-Sept.		99
	96	123	April-Sept.		78
Umatilla at Pendleton	247	121	March-Sept.		204
	178	118	April-Sept.		150
Walla Walla, South Fork near Milton	90	110	March-Sept.		82
	77	111	April-Sept.		69
Willow Creek at Heppner	8.5	125	March-July		6.8

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	May 26	May 17
So. Fk. Walla Walla near Milton	200	June 21	June 9
	109	Aug.-Sep. Min.	Avg. value 105

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Cold Springs	50.0	30.0	35.6	40.0
McKay	73.8	59.1	45.8	41.1

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
McKay Creek	3	810	130
Umatilla River	3	378	132
Walla Walla River	3	415	126

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

The John Day basin will experience excellent water supplies this next spring and summer. The mountain snowpack is 130 to 145% of normal. Rainfall during February was about 1½ times normal. Soils are saturated and streamflow during the next 5 months will be very good ranging from 120 to 150% of average.





# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Camas Creek near Ukiah	50	120	March-July		42
	41	120	April-Sept.		34
John Day, Middle Fork at Ritter	165	124	March-July		133
	140	124	April-Sept.		113
John Day, North Fork at Monument	800	125	March-July		639
	676	125	April-Sept.		541
Mountain Creek nr. Mitchell	6.0	150	March-July		4.0 <sup>b</sup>
Strawberry near Prairie City	9.4	127	March-July		7.3
	9.8	124	April-Sept.		7.7

## FORECAST DATE of LOW FLOW VALUES

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value	RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
						Last Year	Average <sup>c</sup>
John Day at Service Creek	316	Aug. 1	Avg. value 212	John Day, North Fork	7	284	128
				John Day abv. Dayville	5	244	146

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

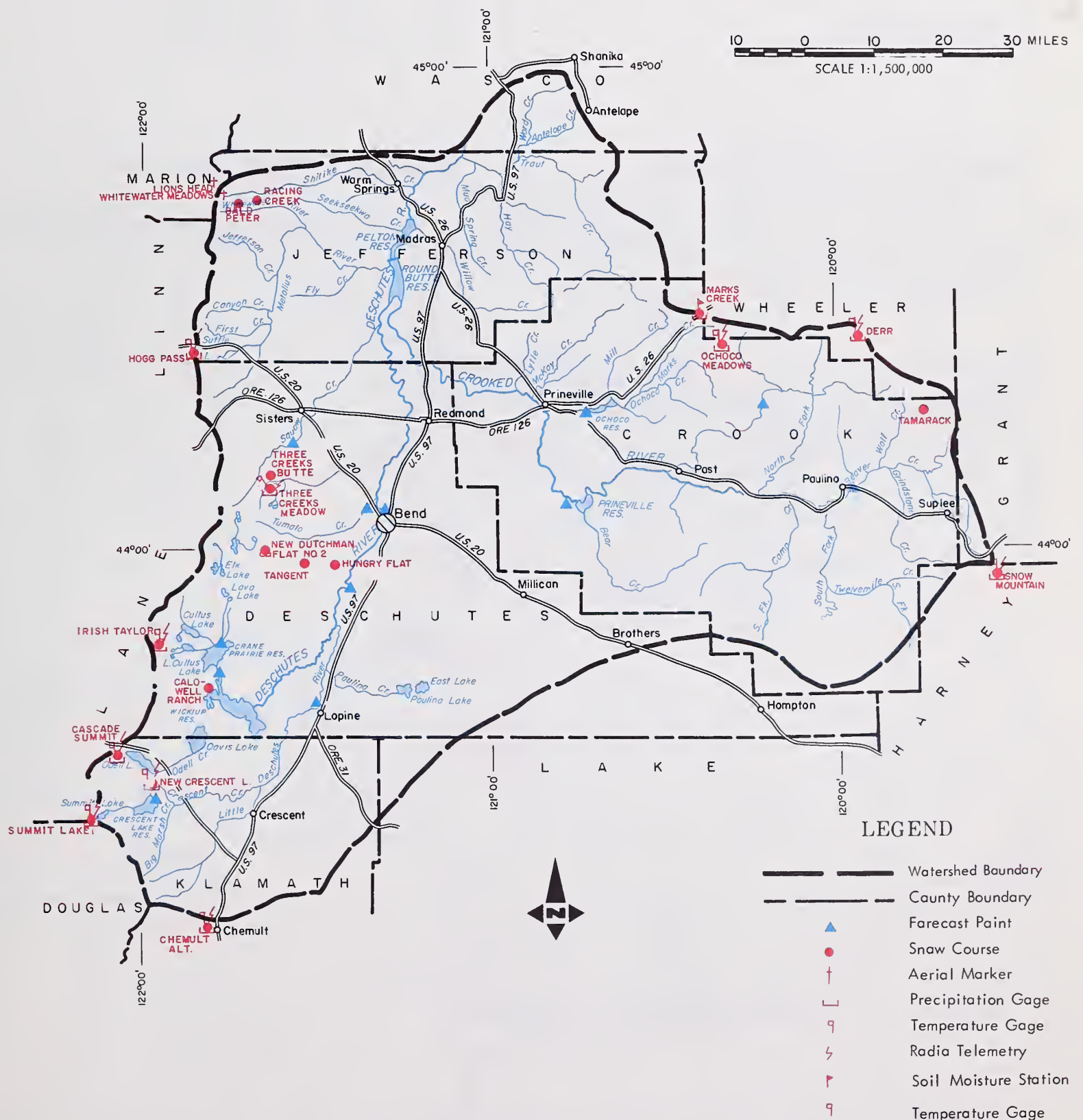
# WATER SUPPLY OUTLOOK

## UPPER DESCHUTES, CROOKED WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Excellent water supplies are forecast for almost all water users in the Deschutes-Crooked River basin. The mountain snowpack is 120 to 135% of average on the Deschutes and 150% on the Crooked. Rainfall was 140% during February. Reservoir storage is good except at Crescent Lake which is only a little over 1/3 full. Streamflow is forecast to range from 110% on Crescent Creek up to 150% on the Little Deschutes. The Crooked River is expected to flow at 160%. This is the best water year in the area since 1976.



# STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Beaver Creek near Paulina	28	177	April-July		16.0
	29	180	April-Sept.		16.1
Crane Prairie Reservoir total Inflow	167	139	April-Sept.		120
Crescent at Crescent Lake	22	110	March-July		20
	24	110	April-Sept.		22
Crooked River nr. Prineville	220	165	March-July		134
	145	161	April-Sept.		90
Crooked R., No.Fk.blw. Lookout Cr.nr. Paulina	20	155	March-July		13.2 <sup>b</sup>
Deschutes below Bend	183	--	Aug.-Sept.		--
Deschutes at Benham Falls	412	112	April-July		368
	627	112	April-Sept.		560
Deschutes below Snow Creek	94	135	March-Sept.		69
	88	139	April-Sept.		63
Deschutes, Little near La Pine	138	156	March-July		89
	126	149	April-Sept.		84
Ochoco Reservoir net Inflow	54	224	March-July		24
	36	225	April-Sept.		16
Squaw near Sisters	63	129	April-Sept.		49
Tumalo near Bend	54	121	April-Sept.		45

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	528	Peak	
	310	Oct. 31	
	Peak	May 30	
Crooked R. nr. Post	100	June 16	June 1
Deschutes at Bend	1500	Sept. 10	July 1
Little Deschutes nr. La Pine	400	June 20	June 7
	200	July 24	July 8
Squaw Cr. nr. Sisters	100	Sept. 22	Aug. 16
Tumalo Cr. nr. Bend	235	July 12	June 23
	207	July 14	June 25
	150	July 26	July 5
	71	Sept. 16	Aug. 7

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Crane Prairie	55.3	31.7	31.4	46.1
Crescent Lake	86.9	31.9	25.9	63.5
Ochoco	47.5	40.6	37.4	28.8
Prineville	153.0	126.7	130.7	101.1
Wickiup	200.0	164.6	156.3	173.2

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Crooked, Ochoco	4	310	147
Deschutes abv. Wickiup	3	303	124
Little Deschutes	4	488	117
Tumalo & Squaw Crs.	3	368	137

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# WATER SUPPLY OUTLOOK

## HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Hood River and Wasco counties will experience good water supplies this next spring and summer. The snowpack is 120 to 130% of average except on the Mile Creeks where it is 82%. Rainfall during February was 121% of average. Streamflow should be 120 to 130% of average over the next 5 months.

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# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Hood River at Tucker Bridge nr. Hood River	290	120	April-July		242
	347	120	April-Sept.		289
Hood River, West Fork near Dee	148	117	April-July		127
	174	117	April-Sept.		149
White below Tygh Valley	145	128	April-July		114
	163	127	April-Sept.		129

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*44	July 15-31	**39
*Average cfs forecast to flow for this two-week period.			
**Average cfs for period of record.			
White blw. Tygh Valley	200	July 10	July 3
	175	Aug. 1	Avg. value 145

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Clear Lake (Wasco)	11.9	3.3	2.6	4.6

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Hood River	5	710	117
Mile Creeks	1	840	82
White River	3	617	127

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.





## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Sandy River	2	582	132

## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Columbia at The Dalles	10,000	113	April-July		88,520
	117,000	113	April-Sept.		103,500
Sandy River near Marmot	378	115	April-July		329
	441	115	April-Sept.		384

## HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW <sup>d</sup> (1,000 A F)			REGULATED PEAK (1,000 cfs)	DATE
	APR. — SEPT.	APR. — JUNE	MAY — JUNE		
1963	87,860	58,499	47,812	437	June 18
1964	110,422	73,512	63,670	662	June 18
1965	114,222	80,098	62,467	520	June 9
1966	87,386	58,250	45,962	396	June 12
1967	109,319	74,378	66,452	622	June 10
1968	89,102	55,593	47,994	404	June 13
1969	112,377	85,742	63,899	515	May 15
1970	88,243	62,993	55,227	425	May 28
1971	126,898	91,781	76,453	557	May 13
1972	135,500	97,041	81,451	619	June 20
1973	65,549	43,765	36,565	221	December 5
1974	139,501	99,035	78,946	588	June 20
1975	108,906	73,018	62,861	422	May 17
1976	122,771	79,084	62,554	418	May 14
1977	54,108	35,505	28,394	213	January 25
1963-77 Avg.	103,478	71,220	58,714	468	

## LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s.)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894)	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32 (1972)	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

# WATER SUPPLY OUTLOOK

## WILLAMETTE WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

The Willamette Valley can expect good water supplies this next spring and summer. The snowpack is 100 to 120% of average except on the lower elevation watersheds such as the Coast Fork which is 77%. The generous, warm rains during February caused much melt at the lower elevations resulting in heavy streamflows during the month. Rainfall was 145% of normal. This is expected to be the best water year since 1976. Most of the large reservoirs will fill as the snowmelt runoff comes later in the spring.





# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Clackamas at Estacada	708	105	April-July		672
	820	104	April-Sept.		786
Clackamas above Three Lynx	542	105	April-July		515
	637	104	April-Sept.		607
McKenzie at McKenzie Bridge	499	110	April-July		452
	657	110	April-Sept.		598
McKenzie near Vida	1,148	112	April-July		1,024
	1,397	111	April-Sept.		1,259
McKenzie, So. Fork near Rainbow	244	118	April-July		207
	274	117	April-Sept.		234
Mohawk River near Springfield	146	125	March-July		117
Oak Grove Fork above Power Intake	159	116	April-July		132
	200	114	April-Sept.		168
Row near Dorena	98	100	April-July		98
	104	100	April-Sept.		104
Santiam, North at Mehama	816	108	April-July		752
	920	107	April-Sept.		860
Santiam, South at Waterloo	602	110	April-July		547
	649	110	April-Sept.		590
Scoggins Creek nr. Gaston	32	110	March-July		29
Thomas Creek near Scio	137	117	March-July		117
Willamette, Coast Fork nr. London	30	111	April-July		27
Willamette, Mid.Fk.blw. N.Fk. nr. Oakridge	748	111	April-July		678
	849	110	April-Sept.		776
Willamette, No.Fk. of Mid.Fk. near Oakridge	215	115	April-July		188
	241	115	April-Sept.		209
Willamette at Salem	4,634	110	April-July		4,213
	5,167	110	April-Sept.		4,697

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Clackamas River	2	--	97
McKenzie River	3	642	122
Row River	2	935	77
Santiam River	4	1,032	112
Willamette, Mid. Fk.	4	418	109

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Blue River	85.6*	35.0	41.0	27.8
Cottage Grove	30.0*	8.0	9.7	8.0
Cougar	155.2*	72.6	60.3	41.2
Detroit	299.9*	162.8	159.2	97.6
Dorena	70.5*	18.1	32.7	18.7
Fall Creek	115.0*	51.3	51.0	35.1
Fern Ridge	94.2*	44.8	51.9	35.5
Foster	30.0*	8.4	8.4	5.7 <sup>b</sup>
Green Peter	270.0*	146.1	158.8	97.1
Hills Creek	200.0*	113.4	84.2	60.0
Lookout Point	337.2*	176.8	95.0	94.0
Timothy Lake	61.7	60.2	49.7	54.8
Henry Hagg Lake	53.0	47.4	46.4	--

\* Multiple purpose reservoir--space reserved primarily for flood runoff.

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# WATER SUPPLY OUTLOOK

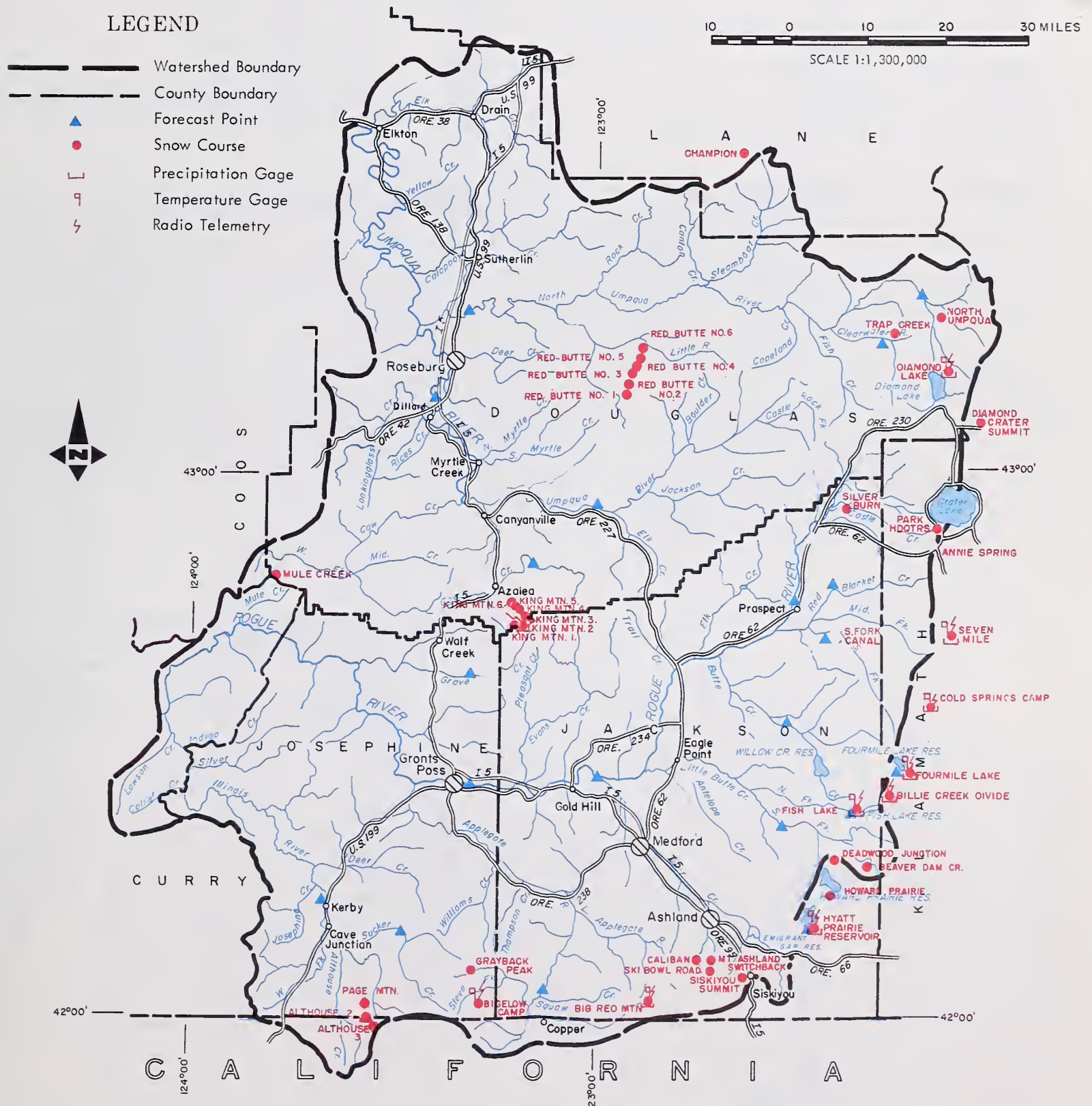
## ROGUE, UMPQUA, WATERSHEDS

### OREGON

Area 9

#### GENERAL OUTLOOK

Water supplies in the Rogue and Umpqua basins are expected to be better than average this next spring and summer. The snowpack is 110 to 115% in the Cascades, but ranges from 44% to 90% in the Siskiyou. Rainfall during February was 130% of average. The rain came with warm temperatures and melted much snow on the Applegate and Illinois drainages with resultant high streamflow. Streamflows are expected to be generally above average during the next 4 to 5 months.



# STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Applegate near Copper	112	87	April-Sept.		129
Clearwater above Trap Creek	71	100	April-Sept.		71
Cow Creek nr. Azalea	32	105	March-July		31
Fourmile Lake net Inflow	6.0	154	April-Sept.		3.9
Grave Creek at Pease Bridge nr. Placer	13.2	90	March-July		14.7
Hyatt Reservoir net Inflow	5.2	106	April-July		4.9
Illinois River near Kerby	156	88	April-July		176
	164	90	April-Sept.		183
Little Butte, N.Fk. at Fish Lake nr. Lake Cr.	19.6	140	April-Sept.		14.0
Little Butte, S.Fk. near Lake Creek	39	124	April-July		31
Red Blanket Creek nr. Prospect	40	115	April-July		35
Rogue above Prospect	283	110	April-July		257
	345	110	April-Sept.		314
Rogue, South Fork near Prospect	70	112	April-July		62
	82	112	April-Sept.		74
Rogue at Raygold near Central Point	917	121	April-July		756
	1,106	120	April-Sept.		919
Rogue at Grants Pass	1,120	123	April-Sept.		913
Sucker Cr. blw. Little Grayback nr. Holland	58	100	April-July		58
Umpqua, No.blw. Lemolo Lake, nr. Toketee Falls	196	115	April-Sept.		170
Umpqua, No. at Winchester	883	115	April-July		768
Umpqua, So. near Brockway	418	110	April-July		380
Umpqua, So. at Tiller	201	110	April-July		183
So.Fk. Big Butte Cr. nr. Butte Falls	45	122	April-July		37

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Cow Creek nr. Azalea	20	July 1	July 4
	10	Aug. 19	Aug. 19
Little Butte Creek, South Fork	100	June 12	May 15
So. Umpqua nr. Brockway	90	Aug. 5	July 30
So. Umpqua at Tiller	140	July 14	July 10
	90	Aug. 6	July 30
	60	Sept. 6	Aug. 27

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Applegate	75.2	42.8	--	--
Emigrant Lake	39.0	33.7	30.1	29.3
Fish Lake	8.0	4.1	5.5	6.0
Fourmile Lake	16.1	6.9	4.2	9.9
Howard Prairie	60.0	56.5	43.5	45.7
Hyatt Prairie	16.1	15.3	11.5	12.4
Lost Creek	315.0	254.0	226.9	--

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Applegate	2	326	76
Bear Creek	2	199	86
Butte Creek	4	460	84
Illinois River	3	278	44
North Umpqua	3	5,255	110
Rogue River	4	489	112
Mt. Ashland	4	204	100

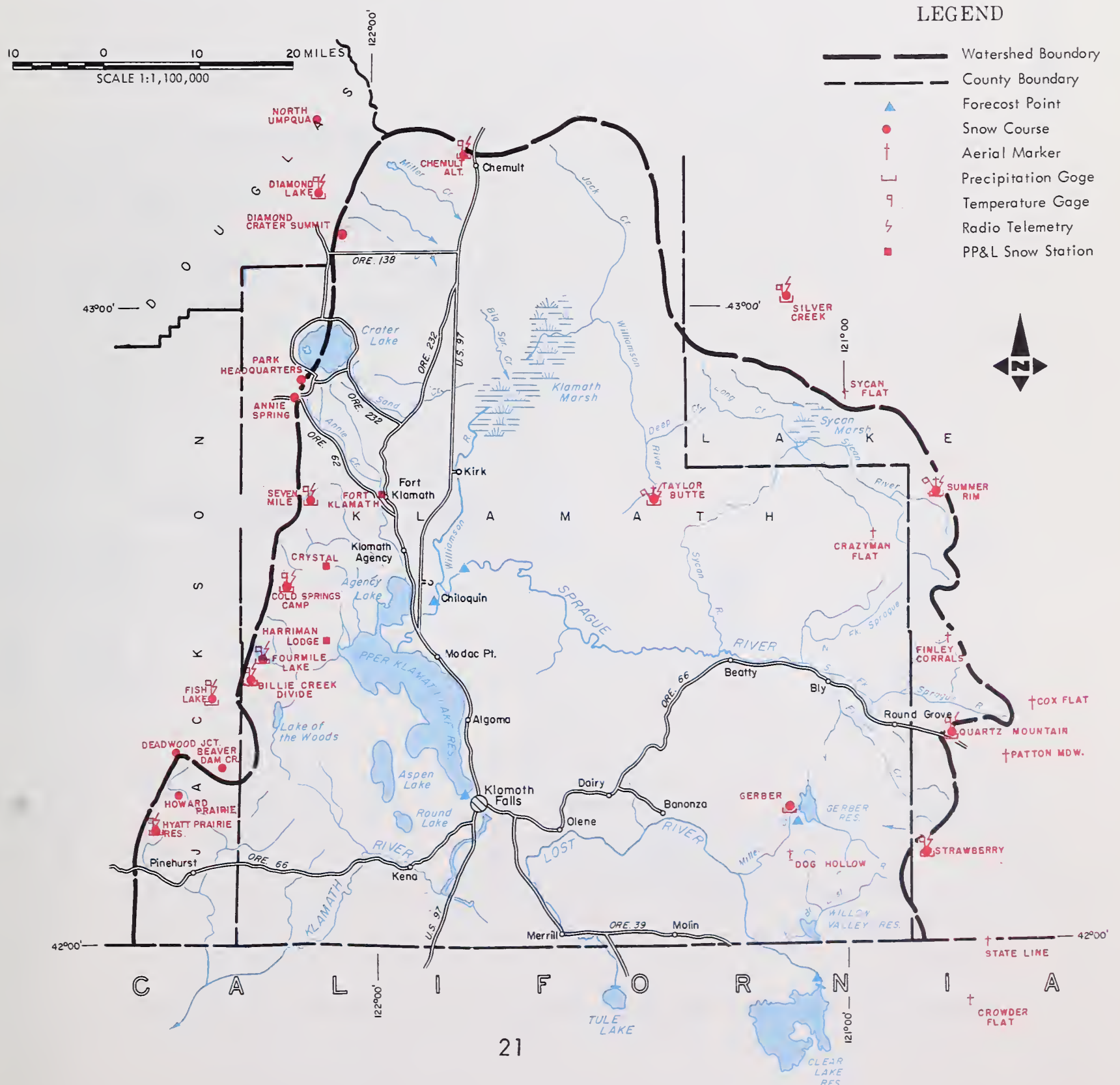
(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# WATER SUPPLY OUTLOOK KLAMATH WATERSHEDS OREGON

## GENERAL OUTLOOK

Water supplies in Klamath County are expected to be excellent. The snowpack is 115% in the Cascades and near 105% on the Sprague. The snow cover on the Lost River is 85%. Rainfall was 230% of average during February. Warm temperatures along with the rain melted much of the lower elevation snow with resultant high streamflow. Reservoir storage is now above average in Upper Klamath Lake, Clear Lake and Gerber. Streamflow during the next 5 months is forecast to range from 115% at Clear Lake to 135% on the Williamson.





## STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Clear Lake Reservoir Inflow	85	115	March-July		74
Gerber Reservoir Inflow	44	133	March-July		33
Sprague near Chiloquin	326	120	March-July		272
	295	122	April-Sept.		242
Upper Klamath Lake net Inflow	773	122	March-July		632
	657	125	April-Sept.		526
Williamson below Sprague River	552	135	April-Sept.		409

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Clear Lake	440.2	258.5	159.6	250.7
Gerber	94.0	87.1	36.6	55.9
Upper Klamath Lake	584.0	487.2	445.9	409.6

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Lost River	4	175	84
Sprague River	3	269	103
Upper Klamath	6	511	107
Williamson	3	1,583	112

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# WATER SUPPLY OUTLOOK

## LAKE COUNTY, GOOSE LAKE WATERSHEDS

### OREGON

#### GENERAL OUTLOOK

Lake County water users are expected to have good water supplies this next summer. The mountain snowpack is near average on the Chewaucan and Silver Creek, but is below normal on Drews Creek and the Warner Mountains. The snowpack melted heavily during February because of the warm temperatures and heavy rains. Precipitation was 160% of average. As a result, mountain soils are saturated. Streamflow is forecast to be 130 to 140% during the next 5 months.



# STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Chewaucan near Paisley	128	145	March-July		88
Cottonwood Creek nr. Lakeview	16.2	140	March-July		11.6
Deep above Adel	108	135	March-July		80
Drews Reservoir net Inflow	57	140	March-July		41
Honey Creek near Plush	26	130	March-July		20
Silver Creek near Silver Lake	21.1	150	April-July		14.1
Twentymile near Adel	34	130	March-July		26
Bridge Cr.nr. Spahr Ranch nr. Silver Lake	4.8	140	April-July		3.4

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Deep Cr. above Adel	100	July 5	June 21
Honey Cr. nr. Plush	100	June 13	May 15
	50	June 23	May 30
Twentymile nr. Adel	50	June 18	June 2
	10	July 14	July 3

## RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <sup>c</sup>
Cottonwood	8.7	8.7	3.0	3.5
Drews	63.0	63.5	36.0	42.5
Thompson Valley	19.5	N/R	4.4	15.3

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Chewaucan River	3	269	103
Deep Creek	4	148	89
Drew Creek	3	176	64
Honey Creek	3	199	72
Silver Creek	3	800	110
Twentymile Creek	3	175	58

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.





# STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <sup>c</sup>
Donner und Blitzen near Frenchglen	80	136	March-July		59
	74	130	April-Sept.		57
Silver near Riley	28	175	April-July		15.8
Silvies River near Burns	165	172	March-July		96
	122	159	April-Sept.		77
Trout Creek near Denio	10.2	110	March-July		9.3
	9.2	105	April-Sept.		8.8

## FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Silvies nr. Burns	400	May 27	May 5
	200	June 16	May 21
	100	July 6	June 9
	50	July 19	June 23
Donner und Blitzen	200	June 30	June 15
	100	July 14	July 5
=====			
Malheur Lake at Break in Cole Island Dike near Voltage	<u>GAGE HEIGHT</u>	<u>SURFACE ACRES</u>	<u>AVG. SURFACE ACRES</u>
	July 1 95.52	75,000	40,000
	Aug. 1 95.06	68,000	33,000

## SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <sup>c</sup>
Donner und Blitzen R.	3	186	123
Silver Creek	3	236	111
Silvies River	4	241	153
Trout Creek	2	108	51

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

MARCH 1, 1982

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
OWYHEE MALHEUR WATERSHEDS AREA 1					
Antelope Ridge (Ida.)	2/27	26	10.8	0.0	6.9 <sup>b</sup>
Battle Creek (Ida.) *	2/24	6	2.3	0.0	3.2
Bear Creek (Nev.)	2/26	59	23.0	7.7	17.9
Big Bend (Nev.)	2/23	31	11.2	1.6	7.5
Blue Mountain Springs	2/23	60	19.4	10.6	14.2
Blue Mtn. Spgs. Plw.(T)	N/R			7.2	--
Blue Mtn. Spgs. Plw.(S)	2/23	61	20.8	8.8	15.1 <sup>b</sup>
Blue Mtn. Spgs. Plw.(M)	2/23	--	22.9	4.4	11.3 <sup>b</sup>
Boulder Creek *	2/24	6	2.2	0.1	--
Buck Pasture *	2/24	4	1.4	0.0	2.3
Buckskin, Lower (Nev.)	2/25	19	6.8	3.0	7.1
Buckskin, Upper (Nev.)	2/25	27	10.4	2.2	8.3
Bull Basin (Ida.) *	2/24	TR	0.1	0.0	1.2
Bully Creek *	2/24	3	1.1	0.0	2.1
Call Meadows *	2/24	5	1.8	0.1	3.7
Columbia Basin (Nev.)	2/26	33	12.2	0.0	8.1 <sup>b</sup>
Disaster Peak (Nev.)	2/25	33	13.4	2.5	11.6
Eldorado Pass	2/26	9	3.2	2.4	3.1
Fawn Creek (Nev.)	2/23	43	15.9	6.9	5.2 <sup>b</sup>
Fish Creek *	DISCONTINUED				
Fish Creek	2/26	--	28.5 <sup>a</sup>	15.3	20.5 <sup>b</sup>
Fish Creek (Rev.)	2/26	77	28.2	15.0	21.0 <sup>b</sup>
Fish Creek Pillow (T)	N/R				
Fish Creek Pillow (S)	2/26	72	28.8	28.0	--
Fish Creek Pillow (M)	2/26	--	31.1	26.8	--
Flag Prairie *	2/24	11	4.0	0.1	4.6
Fox Creek (Nev.)	2/26	31	12.5	3.6	9.6 <sup>b</sup>
Fry Canyon (Nev.)	2/23	25	9.8	2.5	5.9 <sup>b</sup>
Gold Creek (Nev.)	2/23	18	5.9	0.0	4.9
Government Corrals	2/24	38	12.3	9.8	--
Granite Peak (Nev.)	2/25	51	19.5	5.5	13.1
Hyde Pasture (Ida.) *	2/24	18	6.8	0.1	5.3
Jack Creek, Lower (Nev.)	2/23	5	1.9	0.0	--
Jack Creek, Upper (Nev.)	2/23	31	11.2	4.4	6.7
Jacks Peak (Nev.)	2/23	81	29.9	10.4	--
Johnston Pond (Ida.) *	N/R				
Lake Creek R.S.	2/23	36	12.6	7.6	9.0
Lake Creek R.S. Plw.(T)	2/23	--	17.4	--	--
Lake Creek R.S. Plw.(S)	2/23	43	15.2	8.5	--
Lake Creek R.S. Plw.(M)	2/23	--	16.4	--	--
Laurel Draw (Nev.)	2/23	24	9.1	4.6	7.4 <sup>b</sup>
Lookout Butte *	2/24	0	0.0	0.0	0.2
Louse Canyon *	2/24	9	3.2	0.0	3.7
Martin Creek (Nev.)	2/25	21	8.6	2.3	8.4
Merritt Mountain (Nev.) *	2/26	9	3.4	0.1	6.9 <sup>b</sup>
Midas (Nev.) *	2/26	0	0.0	0.0	2.2
Mud Flat (Ida.)	2/27	24	9.0	1.6	6.0 <sup>b</sup>
Oregon Canyon *	2/24	3	1.1	0.0	4.4
Quinn Ridge (Nev.) *	2/24	TR	0.1	0.0	1.6
Red Canyon (Ida.) *	2/24	21	8.0	0.1	6.6
Rock Springs	2/22	23	8.2	3.2	5.0
Rock Springs Plw. (T)	N/R			1.7	--
Rock Springs Plw. (S)	2/22	20	6.8	2.5	--
Rock Springs Plw. (M)	2/22	--	6.2	1.6	--
Rodeo Flat (Nev.)	2/23	21	8.2	2.3	4.8
76 Creek (Nev.) *	2/26	47	17.5	5.1	10.7
Silver City (Ida.)	2/27	44	16.8	5.6	13.7
Silver City (Ida.) *	2/24	38	14.4	2.3	12.6 <sup>b</sup>
Silvies *	DISCONTINUED				
Silvies	2/26	26	11.8	6.4	9.8
Silvies Pillow (T)	N/R			5.5	--
Silvies Pillow (S)	2/26	39	16.8	--	--
Silvies Pillow (M)	N/R			5.2	19.3 <sup>b</sup>
South Mountain #2 (Ida.)	2/28	40	15.4	6.2	11.6
South Mtn. #2 Plw. (T)	3/1	--	17.5	5.8	--
Stag Mountain (Nev.) *	2/26	21	8.0	0.1	5.4 <sup>b</sup>
Stinking Water	2/25	TR	0.3	0.1	2.4
Succor Creek (Ida.) *	2/24	14	5.3	3.5	5.6
Taylor Canyon (Nev.)	2/23	19	6.5	0.0	4.5
Toe Jam (Nev.) *	2/26	31	11.8	3.0	8.6 <sup>b</sup>
Tremewan Ranch (Nev.) *	2/23	7	3.1	0.0	1.5
Trout Creek *	2/24	12	4.6	5.3	6.7
"V" Lake *	2/24	27	10.8	0.1	6.1
Vaught Ranch (Ida.) *	2/24	TR	0.1	0.0	4.1 <sup>b</sup>
War Eagle (Ida.) *	2/24	60	22.8	16.4	19.6 <sup>b</sup>

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS AREA 2					
Aneroid Lake #2	2/23	94	34.9	19.2	27.6
Aneroid Lake #2 Plw.(T)	N/R				
Aneroid Lake #2 Plw.(S)	2/23	98	31.5	20.0	--
Aneroid Lake #2 Plw.(M)	N/R			20.7	--
Anthony Lake	2/26	72	27.6	12.8	22.7
Bald Mountain (OR) *	2/25	78	28.9	10.8	19.4
Beaver Reservoir (Rev.)	2/24	44	13.2	6.0	10.8
Beaver Res. Pillow (T)	2/24	--	11.3	--	--
Beaver Res. Pillow (S)	2/24	38	13.2	1.8	--
Beaver Res. Pillow (M)	N/R				
Big Sheep *	2/26	77	29.3	17.4	22.6
Blue Mtn. Summit	2/22	39	12.9	6.3	7.9
Bourne	2/22	55	18.7	7.0	13.8
Bourne Pillow (T)	2/22	--	23.5	11.4	--
Bourne Pillow (S)	2/22	60	21.5	7.8	--
Bourne Pillow (M)	2/22	--	22.7	--	--
County Line (Rev.)	2/23	20	5.5	0.0	4.2
County Line Pillow (T)	2/23	--	6.4	0.4	--
County Line Pillow (S)	2/23	16	4.8	0.0	--
County Line Pillow (M)	2/23	--	5.7	0.0	--
Dooley Mountain	2/25	32	10.6	6.2	7.9
Eilertson Meadows	2/22	34	11.0	2.7	10.2
Eilertson Meadows Plw.(T)	2/22	--	11.3	2.3	--
Eilertson Meadows Plw.(S)	2/22	36	12.6	1.6	--
Eilertson Meadows Plw.(M)	2/22	--	10.7	1.9	--
Eldorado Pass	2/26	9	3.2	2.4	3.1
Gold Center	2/22	38	13.7	4.4	11.5
Gold Center Pillow (T)	2/22	--	12.1	3.9	--
Gold Center Pillow (S)	2/22	34	12.2	3.4	--
Gold Center Pillow (M)	2/22	--	11.4	3.9	--
Goodrich Lake	<sup>e</sup>				
Little Alps	2/26	40	12.8	3.4	12.0
Little Antone (Alt.)	2/26	29	9.4	5.2	--
Lucky Strike	2/23	35	11.2	2.3	10.9
Lucky Strike Pillow (T)	2/23	--	12.7	--	--
Lucky Strike Pillow (S)	2/23	33	10.5	1.9	--
Lucky Strike Pillow (M)	2/23	--	12.7	0.4	9.7 <sup>b</sup>
Mirror Lake *	2/25	192	69.1	37.2	58.3 <sup>b</sup>
Moss Spring	2/25	79	28.6	9.8	20.2
Moss Spring Pillow (T)	N/R			11.0	--
Moss Spring Pillow (S)	2/25	83	29.8	13.0	--
Moss Spring Pillow (M)	2/25	--	26.6	11.0	--
Mt. Howard Pillow (T)	2/25	--	12.3	--	--
Mt. Howard Pillow (S)	2/25	58	18.8	12.5	--
Mt. Howard Pillow (M)	2/25	--	11.8	--	--
Schneider Meadow	2/25	89	34.8	20.6	26.7
Schneider Meadow Plw.(T)	2/25	--	30.4	--	--
Schneider Meadow Plw.(S)	2/25	82	34.0	21.0	--
Schneider Meadow Plw.(M)	2/25	--	28.7	--	--
Standley *	2/25	99	36.6	16.5	25.5
Taylor Green	2/25	60	22.4	12.8	14.6
Taylor Green Pillow (T)	2/25	--	26.8	13.9	--
Taylor Green Pillow (S)	2/25	70	27.8	14.0	--
Taylor Green Pillow (M)	2/25	--	25.4	13.2	--
Tipton	2/22	39	13.6	5.4	9.6
Tipton Pillow (T)	2/22	--	20.8	6.8	--
Tipton Pillow (S)	2/22	51	17.6	7.9	12.6 <sup>b</sup>
Tipton Pillow (M)	2/22	--	19.3	5.9	--
TV Ridge *	2/25	69	25.5	7.3	15.4 <sup>b</sup>
West Eagle Meadows *	2/25	100	37.0	17.3	--
Wolf Creek Pillow (T)	2/22	--	20.8	11.4	--
Wolf Creek Pillow (S)	2/22	57	18.0	11.0	--
Wolf Creek Pillow (M)	2/22	--	20.6	11.3	--

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

## SNOW

SNOW	THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. C
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS AREA 3					
Arbuckle Mountain	2/23	30	10.0	1.6	9.0
Arbuckle Mountain Plw.(T)	2/23	--	27.3	6.1	--
Arbuckle Mountain Plw.(S)	2/23	66	20.9	7.6	--
Arbuckle Mountain Plw.(M)	2/23	--	27.6	7.2	20.0b
Blue Mountain Camp	2/23	48	18.4	0.0	13.6
Bowman Springs Plw.(T)	2/23	--	14.2	1.9	--
Bowman Springs Plw.(S)	2/23	34	11.6	1.4	--
Bowman Springs Plw.(M)	2/23	--	13.6	1.2	--
Butte Creek Summit	N/R				
Emigrant Springs	2/23	22	7.2	0.0	5.0
Emigrant Springs Plw.(T)	2/23	--	10.5	--	--
Emigrant Springs Plw.(S)	2/23	26	9.2	0.0	--
Emigrant Springs Plw.(M)	2/23	--	9.4	0.0	--
High Ridge Pillow (T)	3/1	--	38.3	11.0	--
High Ridge Pillow (S)	3/1	87	36.1	13.1	29.4
High Ridge Pillow (M)	3/1	--	36.6	11.1	--
Lucky Strike	2/23	35	11.2	2.3	10.9
Lucky Strike Pillow (T)	2/23	--	12.7	--	--
Lucky Strike Pillow (S)	2/23	33	10.5	1.9	--
Lucky Strike Pillow (M)	2/23	--	12.7	0.4	9.7b
Madison Butte Pillow (T)	N/R				
Madison Butte Pillow (S)	2/23	18	4.8	0.0	--
Madison Butte Pillow (M)	2/23	--	6.2	0.0	--
UPPER JOHN DAY WATERSHEDS Area 4					
Anthony Lake	2/26	72	27.6	12.8	22.7
Arbuckle Mountain	2/23	30	10.0	1.6	9.0
Arbuckle Mtn. Plw.(T)	2/23	--	27.3	6.1	--
Arbuckle Mtn. Plw.(S)	2/23	66	20.9	7.6	--
Arbuckle Mtn. Plw.(M)	2/23	--	27.6	7.2	20.0b
Blue Mountain Springs	2/23	60	19.4	10.6	14.2
Blue Mtn. Spgs. Plw.(T)	N/R			7.2	--
Blue Mtn. Spgs. Plw.(S)	2/23	61	20.8	8.8	15.1b
Blue Mtn. Spgs. Plw.(M)	2/23	--	22.9	4.4	11.3b
Blue Mountain Summit	2/22	39	12.9	6.3	7.9
Butte Creek Summit	N/R				
Derr	2/23	32	10.5	3.4	8.3
Derr Pillow (T)	2/23	--	19.2	--	--
Derr Pillow (S)	2/23	54	18.0	11.5	--
Derr Pillow (M)	N/R				
Gold Center	2/22	38	13.7	4.4	11.5
Gold Center Plw. (T)	2/22	--	12.1	3.9	--
Gold Center Plw. (S)	2/22	34	12.2	3.4	--
Gold Center Plw. (M)	2/22	--	11.4	3.9	--
Izee Summit	2/22	32	11.0	4.2	6.8
Lucky Strike	2/23	35	11.2	2.3	10.9
Lucky Strike Plw. (T)	2/23	--	12.7	--	--
Lucky Strike Plw. (S)	2/23	33	10.5	1.9	--
Lucky Strike Plw. (M)	2/23	--	12.7	0.4	9.7b
Marks Creek	2/24	14	4.6	0.1	2.9
Ochoco Meadows	3/1	34	13.4	3.8	8.1
Ochoco Meadows Plw. (T)	N/R				
Ochoco Meadows Plw. (S)	3/1	41	12.8	4.8	--
Ochoco Meadows Plw. (M)	N/R				
Snow Mountain	3/1	43	16.5	7.1	11.3
Snow Mountain Plw. (T)	N/R			4.1	--
Snow Mountain Plw. (S)	3/1	39	13.3	6.5	11.3b
Snow Mountain Plw. (M)	3/1	--	13.4	--	--
Starr Ridge	2/22	25	9.2	1.8	5.2
Starr Ridge Plw. (T)	2/22	--	7.8	1.7	--
Starr Ridge Plw. (S)	2/22	22	8.2	2.2	--
Starr Ridge Plw. (M)	2/22	--	8.3	1.4	--
Tipton	2/22	39	13.6	5.4	9.6
Tipton Pillow (T)	2/22	--	20.8	6.8	--
Tipton Pillow (S)	2/22	51	17.6	7.9	12.6b
Tipton Pillow (M)	2/22	--	19.3	5.9	--

## SNOW

SNOW	THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
UPPER DESCHUTES, CROOKED WATERSHEDS AREA 5					
Bald Peter	2/24	106	41.8	8.8	22.7 <sup>b</sup>
Beaver Creek	2/25	30	10.6	--	--
Caldwell Ranch		<sup>e</sup>			
Cascade Summit	2/25	81	32.0	6.1	24.9
Cascade Summit Plw.(T)	2/25	--	36.4	8.5	--
Cascade Summit Plw.(S)	2/25	93	36.8	9.0	--
Cascade Summit Plw.(M)	2/25	--	34.9	8.0	--
Chemult Alternate	3/1	31	11.6	0.6	10.5
Chemult Alt. Plw. (T)	3/1	--	11.0	--	--
Chemult Alt. Plw. (S)	3/1	26	10.5	0.0	--
Chemult Alt. Plw. (M)	3/1	--	10.6	0.0	--
Derr	2/23	32	10.5	3.4	8.3
Derr Pillow (T)	2/23	--	19.2	--	--
Derr Pillow (S)	2/23	54	18.0	11.5	--
Derr Pillow (M)	N/R				
Hogg Pass	2/23	102	38.5	7.4	34.6
Hogg Pass Pillow (T)	2/23	--	43.9	8.4	--
Hogg Pass Pillow (S)	2/23	109	41.5	8.9	--
Hogg Pass Pillow (M)	2/23	--	43.4	8.5	--
Hungry Flat	3/1	6	2.7	0.0	4.9
Irish-Taylor Pillow (T)	N/R				
Irish-Taylor Pillow (S)	2/25	106	37.5	13.5	34.5 <sup>b</sup>
Irish-Taylor Pillow (M)	2/25	--	41.0	16.3	--
Lionshead*	2/26	60	23.4	3.7	--
Marks Creek	2/24	14	4.6	0.1	2.9
New Crescent Lake	2/24	45	15.5	0.3	12.1
New Crescent Lake Plw.(T)	2/24	--	13.7	0.1	--
New Crescent Lake Plw.(S)	2/24	42	14.4	0.2	--
New Crescent Lake Plw.(M)	2/24	--	13.9	0.0	--
New Dutchman Flat #2	3/1	133	60.7	21.4	43.8
Ochoco Meadows	3/1	34	13.4	3.8	8.1
Ochoco Meadows Plw.(T)	N/R				
Ochoco Meadows Plw. (S)	3/1	41	12.8	4.8	--
Ochoco Meadows Plw. (M)	N/R				
Racing Creek	2/24	55	18.6	2.6	12.3 <sup>b</sup>
Snow Mountain	3/1	43	16.5	7.1	11.3
Snow Mountain Plw.(T)	N/R			4.1	--
Snow Mountain Plw.(S)	3/1	39	13.3	6.5	11.3 <sup>b</sup>
Snow Mountain Plw.(M)	3/1	--	13.4	--	--
Summit Lake Pillow (T)	N/R				
Summit Lake Pillow (S)	2/24	100	35.0	12.4	33.1
Summit Lake Pillow (M)	2/24	--	40.3	11.2	--
Tamarack	2/24	17	6.5	0.1	4.6
Tangent	3/1	72	30.5	7.2	20.6
Three Creek Butte	2/23	38	12.3	0.6	9.4
Three Creek Meadow	2/23	55	18.0	1.1	15.2
Three Creek Mdw. Plw.(T)	2/23	--	23.7	--	--
Three Creek Mdw. Plw.(S)	2/23	72	22.2	3.2	--
Three Creek Mdw. Plw.(M)	2/23	--	22.1	3.5	--
Whitewater Meadow *	2/26	12	4.1	2.2	--

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# BASIC DATA SUPPLEMENT 1

MARCH 1, 1982

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. C
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS AREA 6					
Brooks Meadow	2/24	25	8.4	1.0	10.2
Clear Lake	2/24	24	8.7	0.5	9.2
Clear Lake Pillow (T)	2/24	--	14.3	--	--
Clear Lake Pillow (S)	N/R			1.8	--
Clear Lake Pillow (M)	2/24	--	14.5	1.2	--
Clear Lake Expt.	2/24	35	13.3	1.4	14.2
Greenpoint	2/23	21	10.0	0.9	15.0
Greenpoint Pillow (T)	2/23	--	13.8	--	--
Greenpoint Pillow (S)	2/23	25	11.0	0.8	--
Greenpoint Pillow (M)	2/23	--	12.2	0.9	--
Mt. Hood Test Site (T)	N/R			--	50.6 <sup>b</sup>
Mt. Hood Test Site (S)	2/23	153	62.7	13.2	56.4 <sup>b</sup>
Mt. Hood Test Site (M)	2/23	--	64.2	13.1	--
Mud Ridge Pillow (T)	2/24	--	35.0	2.4	--
Mud Ridge Pillow (S)	2/24	82	32.2	3.1	27.2
Mud Ridge Pillow (M)	N/R			2.4	--
Red Hill	2/26	90	38.3	3.7	33.4
Red Hill Pillow (T)	N/R			4.9	--
Red Hill Pillow (S)	2/26	99	41.5	4.5	--
Red Hill Pillow (M)	N/R			4.1	--
Still Creek	DISCONTINUED				
Switchback	2/25	26	9.8	0.9	12.8
Tilly Jane	2/27	99	44.1	5.6	36.4
LOWER COLUMBIA WATERSHED AREA 7					
Blazed Alder Pillow (T)	N/R				
Blazed Alder Pillow (S)	2/24	79	27.4	1.6	--
Blazed Alder Pillow (M)	2/24	--	30.3	1.0	--
Mt. Hood Test Site (T)	N/R			--	50.6 <sup>b</sup>
Mt. Hood Test Site (S)	2/23	153	62.7	13.2	56.4 <sup>b</sup>
Mt. Hood Test Site (M)	2/23	--	64.2	13.1	--
Mud Ridge Pillow (T)	2/24	--	35.0	2.4	--
Mud Ridge Pillow (S)	2/24	82	32.2	3.1	27.2
Mud Ridge Pillow (M)	N/R			2.4	--
North Fork Reservoir (T)	2/24	--	9.9	0.5	--
North Fork Reservoir (S)	2/24	34	9.2	1.0	--
North Fork Reservoir (M)	2/24	--	9.1	0.8	--
Still Creek	DISCONTINUED				
WILLAMETTE WATERSHEDS AREA 8					
Cascade Summit	2/25	81	32.0	6.1	24.9
Cascade Summit Plw. (T)	2/25	--	36.4	8.5	--
Cascade Summit Plw. (S)	2/25	93	36.8	9.0	--
Cascade Summit Plw. (M)	2/25	--	34.9	8.0	--
Champion	2/25	51	20.9	2.2	23.3
Clackamas Lake	3/1	23	10.2	0.0	11.3
Clackamas Lake Plw.(T)	N/R				
Clackamas Lake Plw.(S)	3/1	36	17.5	0.0	--
Clackamas Lake Plw.(M)	N/R				
Clear Lake	2/24	24	8.7	0.5	9.2
Clear Lake Plw. (T)	2/24	--	14.3	--	--
Clear Lake Plw. (S)	N/R			1.8	--
Clear Lake Plw. (M)	2/24	--	14.5	1.2	--
Clear Lake Expt.	2/24	35	13.3	1.4	14.2

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
WILLAMETTE WATERSHEDS (CONT.)					
Daly Lake Plw. (T)	N/R			0.4	--
Daly Lake Plw. (S)	2/24	31	10.5	0.9	--
Daly Lake Plw. (M)	2/24	--	11.2	0.0	--
Dead Horse Grade	2/26	27	11.1	0.1	14.4
Golden Curry Creek	2/25	3	0.6	0.0	4.8 <sup>b</sup>
Hogg Pass	2/23	102	38.5	7.4	34.6
Hogg Pass Pillow (T)	2/23	--	43.9	8.4	--
Hogg Pass Pillow (S)	2/23	109	41.5	8.9	--
Hogg Pass Pillow (M)	2/23	--	43.4	8.5	--
Holland Meadows Plw. (T)	2/24	--	21.1	--	--
Holland Meadows Plw. (S)	2/24	54	20.2	2.6	--
Holland Meadows Plw. (M)	2/24	--	20.5	2.3	--
Jump Off Joe Pillow (T)	2/24	--	10.4	0.8	--
Jump Off Joe Pillow (S)	2/24	37	12.8	0.5	--
Jump Off Joe Pillow (M)	2/24	--	10.9	0.5	--
Layng Creek	DISCONTINUED				
Little Meadows Plw. (T)	2/25	--	19.0	--	--
Little Meadows Plw. (S)	2/24	54	17.5	1.1	--
Little Meadows Plw. (M)	2/24	--	19.2	1.2	--
Lost Creek Ranch	2/26	12	6.0	0.0	3.8
Lund Park	DISCONTINUED				
Marion Forks	2/23	47	13.2	0.0	12.0
Marion Forks Pillow (T)	N/R			0.0	--
Marion Forks Pillow (S)	2/23	48	12.8	0.0	--
Marion Forks Pillow (M)	N/R			0.0	--
Marys Peak	3/2	16	4.8	0.0	9.2 <sup>b</sup>
McCredie Springs	2/25	0	0.0	0.0	0.4 <sup>b</sup>
McKenzie	2/26	92	54.6	11.2	38.4
McKenzie Pillow (T)	2/27	--	45.0	--	--
McKenzie Pillow (S)	2/26	96	43.2	10.0	--
McKenzie Pillow (M)	2/26	--	42.7	11.0	--
Mt. Hood Test Site (T)	N/R			--	50.6 <sup>b</sup>
Mt. Hood Test Site (S)	2/23	153	62.7	13.2	56.4 <sup>b</sup>
Mt. Hood Test Site (M)	2/23	--	64.2	13.1	--
Peavine Ridge Pillow (T)	N/R			--	14.9
Peavine Ridge Pillow (S)	2/24	36	13.1	1.0	--
Peavine Ridge Pillow (M)	2/24	--	14.6	1.1	--
Railroad Overpass	2/25	4	0.8	0.0	2.0
Railroad Overpass Plw. (T)	2/25	--	0.1	--	--
Railroad Overpass Plw. (S)	2/25	0	0.0	0.0	--
Railroad Overpass Plw. (M)	N/R			0.0	--
Roaring River Plw. (T)	2/24	--	32.0	2.8	--
Roaring River Plw. (S)	2/24	78	28.8	3.5	--
Roaring River Plw. (M)	2/24	--	29.9	3.2	--
Saddle Mtn. Pillow (T)	3/1	--	4.0	0.0	--
Salt Creek Falls	2/25	32	12.0	0.7	13.4
Salt Creek Falls Plw. (T)	2/25	--	22.0	2.5	--
Salt Creek Falls Plw. (S)	2/25	56	21.2	2.0	--
Salt Creek Falls Plw. (M)	2/25	--	21.0	2.5	--
Santiam Junction	2/23	68	23.6	0.5	21.4
Santiam Junction Plw. (T)	2/23	--	27.3	1.5	--
Santiam Junction Plw. (S)	2/23	70	25.0	0.5	--
Santiam Junction Plw. (M)	2/23	--	27.6	1.1	--
Seine Creek Pillow (T)	N/R			0.0	--
Still Creek	DISCONTINUED				
Summit Lake Pillow (T)	N/R				
Summit Lake Pillow (S)	2/24	100	35.0	12.4	33.1
Summit Lake Pillow (M)	2/24	--	40.3	11.2	--
Timothy Lake	2/25	34	13.3	--	12.4 <sup>b</sup>
Weaver Creek	2/25	2	0.5	0.0	0.7 <sup>b</sup>
White Branch Slide	2/26	18	7.5	0.0	7.0
Whitewater Bridge	2/23	26	6.2	0.0	4.8

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

MARCH 1, 1982

## SNOW

SNOW	THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
ROGUE, UMPQUA WATERSHEDS AREA 9					
Althouse #2	2/25	2	0.6	0.1	7.5
Althouse #3	2/25	21	6.6	--	--
Annie Spring	3/1	120	47.6	17.0	37.2
Beaver Dam Creek	3/1	21	9.2	2.1	12.5
Bigelow Camp Plw.(T)	2/25	--	6.3	--	--
Bigelow Camp Plw.(S)	2/24	22	8.0	0.0	--
Bigelow Camp Plw.(M)	2/24	--	5.0	0.0	--
Big Red Mountain	2/23	59	21.4	10.2	24.6
Big Red Mtn. Plw.(T)	2/23	--	22.1	--	--
Big Red Mtn. Plw.(S)	2/23	58	21.0	8.8	--
Big Red Mtn. Plw.(M)	2/23	--	20.3	7.7	--
Billie Creek Divide	2/25	49	19.3	4.2	18.6
Billie Cr. Div. Plw. (T)	2/25	--	21.5	6.0	--
Billie Cr. Div. Plw. (S)	2/25	51	20.5	6.0	--
Billie Cr. Div. Plw. (M)	2/25	--	20.0	5.5	--
Caliban	DISCONTINUED				
Caliban (Alternate)	2/21	83	31.0	14.6	--
Champion	2/25	51	20.9	2.2	23.3
Cold Springs Camp	2/22	88	35.0	12.7	29.4
Cold Spgs. Camp Plw. (T)	2/22	--	32.4	--	23.7 <sup>b</sup>
Cold Spgs. Camp Plw. (S)	2/22	68	28.2	4.8	--
Cold Spgs. Camp Plw. (M)	2/22	--	29.6	3.8	--
Deadwood Junction	3/1	8	3.2	1.1	8.6
Diamond-Crater Summit		<sup>e</sup>			
Diamond Lake	2/23	56	20.1	0.9	17.9
Diamond Lake Plw. (T)	2/23	--	12.3	--	--
Diamond Lake Plw. (S)	2/23	43	14.0	0.6	--
Diamond Lake Plw. (M)	2/23	--	11.7	0.4	--
Fish Lake	2/25	28	10.2	2.8	11.8 <sup>b</sup>
Fish Lake Pillow (T)	2/25	--	10.2	--	--
Fish Lake Pillow (S)	2/25	29	11.5	1.0	--
Fish Lake Pillow (M)	2/25	--	9.7	--	--
Fourmile Lake	2/25	54	22.5	7.4	20.4 <sup>b</sup>
Fourmile Lake Pillow (T)	2/25	--	30.5	--	--
Fourmile Lake Pillow (S)	2/25	76	32.7	11.5	--
Fourmile Lake Pillow (M)	2/25	--	28.3	--	--
Grayback Peak	2/21	36	13.2	0.4	20.5
Howard Prairie Reservoir	3/1	14	5.1	2.1	8.3
Hyatt Prairie	3/1	10	3.7	0.0	7.3
Hyatt Prairie Pillow (T)	3/1	--	6.1	--	--
Hyatt Prairie Pillow (S)	N/R				
Hyatt Prairie Pillow (M)	3/1	--	5.5	--	--
King Mountain #1	2/24	5	1.2	0.9	7.6 <sup>b</sup>
King Mountain #2	2/24	2	0.5	1.2	5.0 <sup>b</sup>
King Mountain #2 Plw.(T)	2/25	--	0.6	--	--
King Mountain #2 Plw.(S)	2/24	4	0.5	1.0	--
King Mountain #2 Plw.(M)	2/24	--	0.4	0.9	--
King Mountain #3	2/24	0	0.0	0.0	1.4 <sup>b</sup>
King Mountain #4	2/24	0	0.0	0.0	--
King Mountain #5	2/24	0	0.0	0.0	--
King Mountain #6	2/24	0	0.0	0.0	--
Mt. Ashland Switchback	2/22	88	28.7	15.2	29.9 <sup>b</sup>
Mule Creek	2/24	12	4.1	0.0	8.1 <sup>b</sup>
North Umpqua	2/26	35	14.5	0.0	13.3
Page Mountain	2/25	TR	0.1	0.1	3.6
Park Headquarters	2/26	149	62.6	25.7	50.7
Red Butte #1	2/23	25	9.8	1.2	11.9
Red Butte #2	2/23	14	4.7	1.0	7.8
Red Butte #3	2/23	2	0.2	0.0	4.6 <sup>b</sup>
Red Butte #4	2/23	0	0.0	0.0	1.7
Red Butte #5	2/23	0	0.0	0.0	0.4
Red Butte #6	2/23	0	0.0	0.0	0.2
Seven Mile	2/24	82	33.2	10.0	28.0 <sup>b</sup>
Seven Mile Pillow (T)	2/24	--	35.9	8.8	--
Seven Mile Pillow (S)	2/24	80	31.8	8.0	--
Seven Mile Pillow (M)	2/24	--	33.8	7.5	--
Silver Burn	3/1	31	12.7	0.0	12.0
Siskiyou Summit	2/24	8	2.7	0.6	6.6
Ski Bowl Road	2/22	70	23.4	11.6	25.4 <sup>b</sup>
South Fork Canal	3/1	TR	0.1	0.0	2.0 <sup>b</sup>
Trap Creek	2/26	30	12.8	0.0	11.6

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
KLAMATH WATERSHEDS AREA 10					
Annie Spring	3/1	120	47.6	17.0	37.2
Billie Creek Divide	2/25	49	19.3	4.2	18.6
Billie Cr. Div. Plw.(T)	2/25	--	21.5	6.0	--
Billie Cr. Div. Plw.(S)	2/25	51	20.5	6.0	--
Billie Cr. Div. Plw.(M)	2/25	--	20.0	5.5	--
Chemult Alternate	3/1	31	11.6	0.6	10.5
Chemult Alternate Plw.(T)	3/1	--	11.0	--	--
Chemult Alternate Plw.(S)	3/1	26	10.5	0.0	--
Chemult Alternate Plw.(M)	3/1	--	10.6	0.0	--
Chiloquin (PP&L)	2/28	TR	0.1	--	--
Cold Springs Camp	2/22	88	35.0	12.7	29.4
Cold Spgs. Camp Plw.(T)	2/22	--	32.4	--	23.7 <sup>b</sup>
Cold Spgs. Camp Plw.(S)	2/22	68	28.2	4.8	--
Cold Spgs. Camp Plw.(M)	2/22	--	29.6	3.8	--
Crazyman Flat *	2/24	26	7.8	2.7	8.0
Crowder Flat (Calif.) *	2/24	6	1.8	0.0	2.2
Crystal (PP&L)	2/28	TR	0.1	0.0	8.4 <sup>b</sup>
Diamond-Crater Summit		<sup>e</sup>			
Dog Hollow *	2/24	0	0.0	0.1	0.8
Finley Corrals *	2/24	42	16.0	4.2	14.0
Fort Klamath (PP&L)	2/28	TR	0.1	0.0	3.5 <sup>b</sup>
Fourmile Lake	2/25	54	22.5	7.4	20.4 <sup>b</sup>
Fourmile Lake Plw. (T)	2/25	--	30.5	--	--
Fourmile Lake Plw. (S)	2/25	76	32.7	11.5	--
Fourmile Lake Plw. (M)	2/25	--	28.3	--	--
Gerber	3/1	0	0.0	0.0	2.3 <sup>b</sup>
Harriman (PP&L)	2/28	TR	0.1	0.0	4.3 <sup>b</sup>
Howard Prairie	3/1	14	5.1	2.1	8.3
Hyatt Prairie Reservoir	3/1	10	3.7	0.0	7.3
Hyatt Prairie Res.Plw.(T)	3/1	--	6.1	--	--
Hyatt Prairie Res.Plw.(S)	N/R				
Hyatt Prairie Res.Plw.(M)	3/1	--	5.5	--	--
Park Headquarters	2/26	149	62.6	25.7	50.7
Quartz Mountain	2/25	8	2.5	0.1	5.3
Quartz Mtn. Pillow (T)	2/25	--	6.6	2.2	--
Quartz Mtn. Pillow (S)	2/25	15	5.1	2.4	--
Quartz Mtn. Pillow (M)	2/25	--	5.9	2.4	--
Seven Mile	2/24	82	33.2	10.0	28.0 <sup>b</sup>
Seven Mile Pillow (T)	2/24	--	35.9	8.8	--
Seven Mile Pillow (S)	2/24	80	31.8	8.0	--
Seven Mile Pillow (M)	2/24	--	33.8	7.5	--
State Line (Calif.) *	2/24	14	4.2	3.6	7.1
Strawberry	2/23	17	5.1	3.0	5.9 <sup>b</sup>
Strawberry Pillow (T)	2/23	--	3.6	--	--
Strawberry Pillow (S)	2/23	15	4.2	1.9	--
Strawberry Pillow (M)	2/23	--	3.5	--	--
Summer Rim *	2/24	42	15.2	6.6	12.0 <sup>b</sup>
Summer Rim	3/1	47	17.1	8.2	14.0
Summer Rim Pillow (T)	N/R			7.3	--
Summer Rim Pillow (S)	3/1	56	18.5	6.3	16.1 <sup>b</sup>
Summer Rim Pillow (M)	3/1	--	23.5	9.6	8.3 <sup>b</sup>
Sycan Flat *	2/24	22	6.6	0.4	5.6
Taylor Butte	2/25	14	4.7	0.8	4.2
Taylor Butte Pillow (T)	2/25	--	5.7	1.7	--
Taylor Butte Pillow (S)	2/25	16	5.2	0.8	--
Taylor Butte Pillow (M)	2/25	--	3.6	1.5	--

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 1

MARCH 1, 1982

## SNOW

SNOW	THIS YEAR			PAST RECORD	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
LAKE COUNTY, GOOSE LAKE WATERSHEDS AREA 11					
Adin Mountain (Calif.)	2/26	23	8.8	3.9	10.5.
Bald Mountain (Nev.)	2/24	2	0.6	0.6	2.7
Barley Camp *	2/24	35	13.3	--	--
Bear Flat Meadow *	2/24	20	6.0	3.3	8.0
Camas Creek #1	2/22	19	5.4	2.1	8.4
Camas Creek #2	2/22	25	7.1	3.2	--
Cedar Pass (Calif.)	2/24	35	12.7	8.2	12.9
Colvin Creek *	2/24	9	2.7	0.9	4.1 <sup>b</sup>
Cox Flat *	2/24	6	1.8	1.8	6.8
Crowder Flat (Calif.) *	2/24	6	1.8	0.0	2.2
Dismal Swamp (Calif.) *	2/24	44	18.9	16.2	--
Dismal Swamp #2 Plw.(T)	2/24	--	26.5	--	--
Dismal Swamp #2 Plw.(S)	2/24	67	28.6	16.2	--
Dismal Swamp #2 Plw.(M)	2/24	--	25.2	--	--
Finley Corrals *	2/24	42	16.0	4.2	14.0
Hart Mountain *	2/24	6	1.8	0.9	1.4
Little Bally Mtn. (Nev.)	2/24	3	0.9	0.9	2.6
Mt. Bidwell (Calif.)	2/24	53	20.7	13.4	--
North Star (Calif.)	2/25	24	9.6	10.4	--
Patton Meadows *	2/24	38	14.4	6.0	14.5
Quartz Mountain	2/25	8	2.5	0.1	5.3
Quartz Mountain Plw.(T)	2/25	--	6.6	2.2	--
Quartz Mountain Plw.(S)	2/25	15	5.1	2.4	--
Quartz Mountain Plw.(M)	2/25	--	5.9	2.4	--
Reservation Creek (Calif.)	2/25	21	8.0	--	--
Rogger Meadows *	2/24	27	7.6	3.7	--
Sherman Valley *	2/24	28	8.4	5.3	10.3
Silver Creek	2/23	3	0.7	0.3	1.1
Silver Creek Plw.(T)	2/26	--	11.7	--	--
Silver Creek Plw.(S)	2/26	34	12.0	5.6	--
Silver Creek Plw.(M)	2/26	--	12.3	--	--
State Line (Calif.) *	2/24	14	4.2	3.6	7.1
Strawberry	2/23	17	5.1	3.0	5.9 <sup>b</sup>
Strawberry Plw.(T)	2/23	--	3.6	--	--
Strawberry Plw.(S)	2/23	15	4.2	1.9	--
Strawberry Plw.(M)	2/23	--	3.5	--	--
Summer Rim *	2/24	42	15.2	6.6	12.0 <sup>b</sup>
Summer Rim	3/1	47	17.1	8.2	14.0
Summer Rim Plw.(T)	N/R			7.3	--
Summer Rim Plw.(S)	3/1	56	18.5	6.3	16.1 <sup>b</sup>
Summer Rim Plw.(M)	3/1	--	23.5	9.6	8.3 <sup>b</sup>
Sycan Flat *	2/24	22	6.6	0.4	5.6

## SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST RECORD	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (Inches)	
				Last Yr.	Ave. <sup>c</sup>
HARNEY BASIN WATERSHEDS AREA 12					
Blue Mountain Springs	2/23	60	19.4	10.6	14.2
Blue Mtn. Spgs. Plw.(T)	N/R			7.2	--
Blue Mtn. Spgs. Plw.(S)	2/23	61	20.8	8.8	15.1 <sup>b</sup>
Blue Mtn. Spgs. Plw.(M)	2/23	--	22.9	4.4	11.3 <sup>b</sup>
Buck Pasture *	2/24	4	1.4	0.0	2.3
Buckskin Lake *	2/24	2	0.7	0.0	0.3 <sup>b</sup>
Call Meadows *	2/24	5	1.8	0.1	3.7
Delintment Lake		<sup>e</sup>			
Denio Creek *	DISCONTINUED				
Disaster Peak (Nev.)	2/25	33	13.4	2.5	11.6
Emigrant Butte	3/1	0	0.0	0.0	3.7 <sup>b</sup>
Fish Creek *	DISCONTINUED				
Fish Creek	2/26	--	28.5 <sup>a</sup>	15.3	20.5 <sup>b</sup>
Fish Creek (Rev.)	2/26	77	28.2	15.0	21.0 <sup>b</sup>
Fish Creek Plw.(T)	N/R				
Fish Creek Plw.(S)	2/26	72	28.8	16.0	--
Fish Creek Plw.(M)	2/26	--	31.1	12.0	--
Government Corrals	2/24	38	12.3	9.8	--
Hart Mountain *	2/24	6	1.8	0.9	1.4
Idlewild Camp Alt.	2/26	0	0.0	0.0	4.6 <sup>b</sup>
Izee Summit	2/22	32	11.0	4.2	6.8
Lake Creek R.S.	2/23	36	12.6	7.6	9.0
Lake Creek R.S. Plw.(T)	2/23	--	17.4	--	--
Lake Creek R.S. Plw.(S)	2/23	43	15.2	8.5	--
Lake Creek R.S. Plw.(M)	2/23	--	16.4	--	--
Oregon Canyon *	2/24	3	1.1	0.0	4.4
Pueblo Summit *	2/24	TR	0.1	--	--
Rock Springs	2/22	23	8.2	3.2	5.0
Rock Springs Plw.(T)	N/R			1.7	--
Rock Springs Plw.(S)	2/22	20	6.8	2.5	--
Rock Springs Plw.(M)	2/22	--	6.2	1.6	--
Silvies *	DISCONTINUED				
Silvies	2/26	26	11.8	6.4	9.8
Silvies Pillow (T)	N/R			5.5	--
Silvies Pillow (S)	2/26	39	16.8	--	--
Silvies Pillow (M)	N/R			5.2	19.3 <sup>b</sup>
Snow Mountain	3/1	43	16.5	7.1	11.3
Snow Mountain Plw.(T)	N/R			4.1	--
Snow Mountain Plw.(S)	3/1	39	13.3	6.5	11.3 <sup>b</sup>
Snow Mountain Plw.(M)	3/1	--	13.4	--	--
Starr Ridge	2/22	25	9.2	1.8	5.2
Starr Ridge Pillow (T)	2/22	--	7.8	1.7	--
Starr Ridge Pillow (S)	2/22	22	8.2	2.2	--
Starr Ridge Pillow (M)	2/22	--	8.3	1.4	--
Stinking Water	2/25	TR	0.3	0.1	2.4
Trout Creek *	2/24	12	4.6	5.3	6.7
"V" Lake *	2/24	27	10.8	0.1	6.1
* Aerial N/R No Report TR Trace T = Telemetry Measurement S = Snow Tube Measurement M = Manometer Measurement					

\* Aerial  
N/R No Report  
TR Trace  
T = Telemetry Measurement  
S = Snow Tube Measurement  
M = Manometer Measurement

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.

# BASIC DATA SUPPLEMENT 2

MARCH 1, 1982

## PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average <sup>c</sup>
Aneroid Lake #2 (Wallowa County)	7300	From 10/1 To 2/23	30.84"		
Arbuckle Mountain (Morrow County)	5400	From 1/29 To 2/23	5.00"		
Bigelow Camp (Josephine County)	5120	From 1/28 To 2/24	10.56"		
Big Red Mountain (Jackson County)	6250	From 9/30 To 2/23	57.24"		
Billie Creek Divide (Jackson County)	5310	From 12/30 To 2/25	15.72"		
Blazed Alder (Clackamas County)	3650	From 9/30 To 2/24	92.76"		
Blue Mountain Springs (Grant County)	5900	From 1/27 To 2/23	6.60"		
Bourne (Baker County)	5800	From 1/27 To 2/22	5.16"		
Bowman Springs (Union County)	4580	From 12/29 To 2/23	7.18"		
Cascade Summit (Lane County)	4880	From 1/28 To 2/25	10.68"		
Chemult (Klamath County)	4760	From 2/1 To 3/1	5.04"		
Clackamas Lake (Clackamas County)	3400	From 9/28 To 3/1	48.48"		
Clear Lake (Wasco County)	3500	From 1/28 To 2/24	8.40"		
County Line (Umatilla County)	4800	From 1/29 To 2/23	2.52"		
Daly Lake (Linn County)	3600	From 2/3 To 2/24	13.92"		
Derr (Wheeler County)	5670	From 1/29 To 2/23	3.60"		
Diamond Lake (Douglas County)	4600	From 12/21 To 2/23	14.88"		
Eilertson Meadows (Baker County)	5400	From 1/27 To 2/22	4.68"		
Emigrant Springs (Umatilla County)	3925	From 1/29 To 2/23	5.28"		
Fish Creek (Harney County)	7900	From 1/27 To 2/26	5.40"		
Fish Lake (Jackson County)	4665	From 1/28 To 2/25	5.28"		
Fourmile Lake (Klamath County)	6000	From 1/28 To 2/25	11.28"		

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 2

MARCH 1, 1982

## PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average <sup>c</sup>
Gold Center (Grant County)	5340	From 1/27 To 2/22	3.48"		
High Ridge (Umatilla County)	4150	From 2/1 To 3/1	11.40"		
Hogg Pass (Jefferson County)	4755	From 1/26 To 2/23	16.68"		
Holland Meadows (Lane County)	4900	From 1/29 To 2/24	9.72"		
Hyatt Prairie (Jackson County)	4900	From 2/1 To 3/1	4.56"		
Irish-Taylor (Deschutes County)	5500	From 1/28 To 2/25	20.40"		
Jump Off Joe (Linn County)	3400	From 1/29 To 2/24	15.48"		
King Mountain #2 (Douglas County)	4500	From 1/26 To 2/24	7.92"		
Lake Creek (Grant County)	5120	From 1/27 To 2/23	4.08"		
Lucky Strike (Umatilla County)	5050	From 1/29 To 2/23	3.25"		
Madison Butte (Morrow County)	5250	From 1/29 To 2/23	2.76"		
Marks Creek (Crook County)	4540	From 1/7 To 2/24	4.40"		
McKenzie (Lane County)	5000	From 2/1 To 2/26	14.76"		
Moss Springs (Union County)	5850	From 1/28 To 2/25	9.48"		
Mt. Hood Test Site (Clackamas County)	5400	From 12/29 To 2/23	43.75"		
Mt. Howard (Wallowa County)	7910	From 1/29 To 2/25	5.52"		
Mud Ridge (Clackamas County)	4050	From 1/28 To 2/24	11.04"		
New Crescent Lake (Klamath County)	4800	From 1/27 To 2/24	6.96"		
North Fork Reservoir (Multnomah County)	3120	From 9/30 To 2/24	65.28"		
Ochoco Meadows (Crook County)	5200	From 2/2 To 3/1	3.60"		
Peavine Ridge (Clackamas County)	3500	From 1/27 To 2/24	11.52"		
Quartz Mountain (Lake County)	6300	From 1/29 To 2/25	3.60"		

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.



# BASIC DATA SUPPLEMENT 2

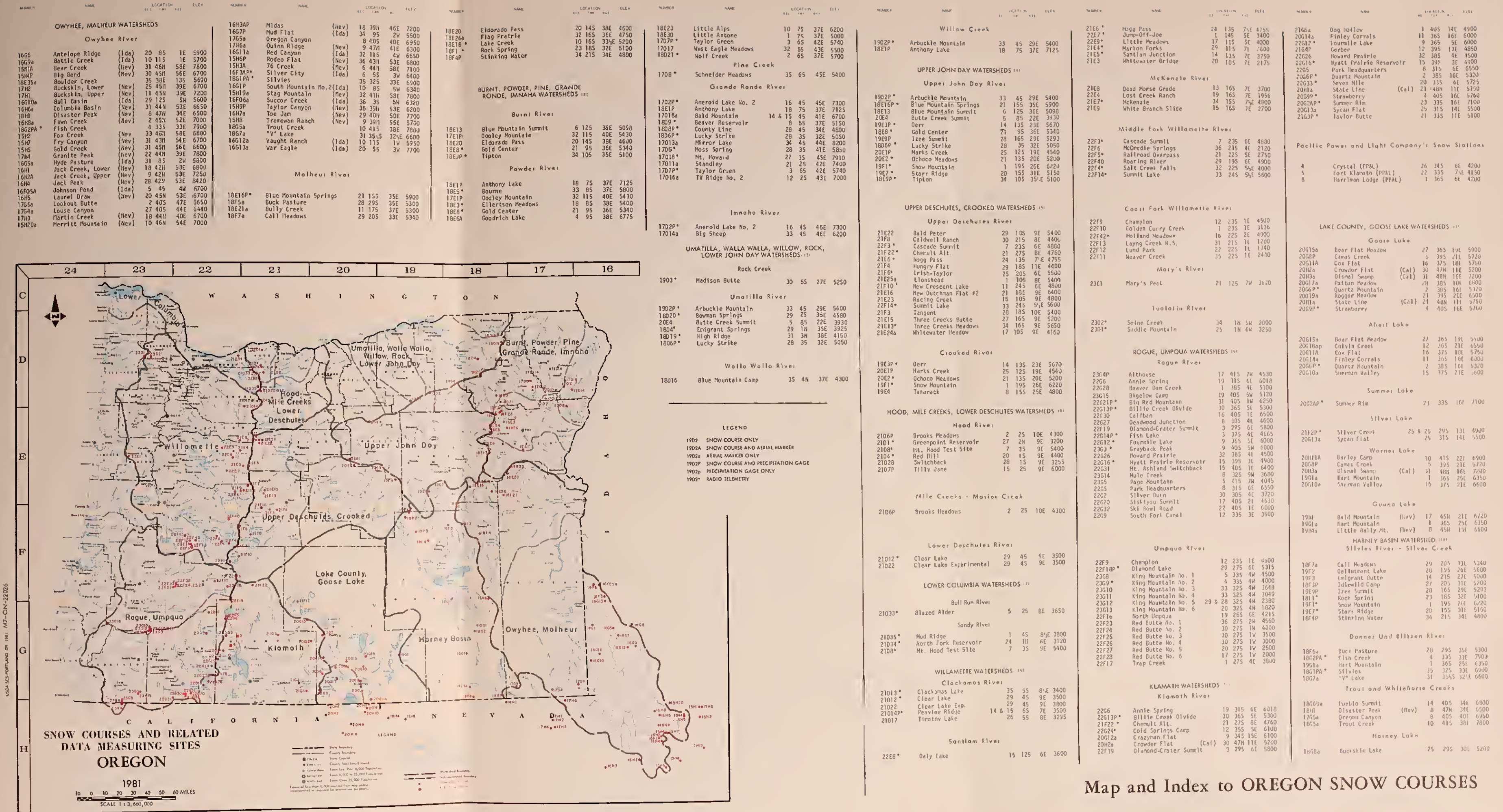
MARCH 1, 1982

## PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average <sup>c</sup>
Railroad Overpass (Lane County)	2750	From 2/1 To 2/25	7.80"		
Red Hill (Hood River County)	4400	From 1/27 To 2/26	18.72"		
Roaring River (Lane County)	4900	From 1/29 To 2/24	11.28"		
Rock Springs (Grant County)	5100	From 1/26 To 2/22	2.16"		
Salt Creek Falls (Lane County)	4000	From 1/25 To 2/25	14.64"		
Santiam Junction (Lane County)	3750	From 1/26 To 2/24	6.96"		
Schneider Meadows (Baker County)	5400	From 1/29 To 2/25	13.44"		
Seven Mile (Klamath County)	5725	From 9/29 To 2/24	58.92"		
Silver Creek (Lake County)	5720	From 1/29 To 2/26	5.16"		
Silvies (Harney County)	6900	From 9/29 To 2/26	10.80"		
Snow Mountain (Harney County)	6220	From 1/29 To 3/1	2.88"		
Starr Ridge (Grant County)	5156	From 1/26 To 2/22	2.04"		
Strawberry (Lake County)	5760	From 1/28 To 2/23	2.64"		
Summer Rim (Lake County)	7100	From 10/7 To 3/1	23.40"		
Summit Lake (Klamath County)	5600	From 1/27 To 2/24	17.88"		
Taylor Butte (Klamath County)	5040	From 1/25 To 2/25	5.64"		
Taylor Green (Baker County)	5740	From 1/28 To 2/25	6.36"		
Three Creek Meadows (Deschutes County)	5650	From 1/26 To 2/23	11.52"		
Tipton (Baker County)	5100	From 1/27 To 2/22	3.36"		

(a) Estimated. (b) 1963-77 adjusted average. (c) 1963-77, 15 year average. (d) Corrected to natural flow. (e) Not scheduled.





Map and Index to OREGON SNOW COURSES





# The Following Organizations Cooperate in the Oregon Snow Survey Work

## STATE

*Idaho Cooperative Snow Surveys*  
*Nevada Cooperative Snow Surveys*  
*Oregon State University*  
*Oregon Department of Water Resources*  
*Soil and Water Conservation Districts of Oregon*

## COUNTY

*Douglas County Water Resources Survey*

## FEDERAL

*Department of Agriculture*  
*Cooperative Extension Service*  
*Forest Service*  
*Soil Conservation Service*  
*Department of Army*  
*Corps of Engineers*  
*Department of Commerce*  
*NOAA, National Weather Service*  
*Department of Energy*  
*Bonneville Power Administration*  
*Department of the Interior*  
*Bureau of Land Management*  
*Fish and Wildlife Service*  
*Geological Survey*  
*Bureau of Reclamation*

## PUBLIC UTILITIES

*Pacific Power and Light Company*  
*Portland General Electric Company*  
*California-Pacific National*

## MUNICIPALITIES

*City of Baker*  
*City of La Grande*  
*City of Portland*  
*City of The Dalles*  
*City of Walla Walla*

## IRRIGATION DISTRICTS

*Arnold Irrigation District*  
*Associated Ditch Companies*  
*Burnt River Irrigation District*  
*Central Oregon Irrigation District*  
*East Fork Irrigation District*  
*Grants Pass Irrigation District*  
*Hood River Irrigation District*  
*Jordan Valley Irrigation District*  
*Juniper Flat Irrigation District*  
*Lakeview Water Users, Incorporated*  
*Medford Irrigation District*  
*Middle Fork Irrigation District*  
*North Board of Control - Owyhee Project*  
*Ochoco Irrigation District*  
*Rogue River Valley Irrigation District*  
*South Board of Control - Owyhee Project*  
*Squaw Creek Irrigation District*  
*Talent Irrigation District*  
*Tumalo Project*  
*Vale - Oregon Irrigation District*  
*Warmsprings Irrigation District*

## PRIVATE ORGANIZATIONS

*The Crag Rats, Hood River, Oregon*

UNITED STATES DEPARTMENT OF AGRICULTURE  
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